

## Kenmore C877.15 Instruction Manual



## *Introduction*

In your choice of an electric sewing machine you have selected one of the world's finest. Your new electric sewing machine is designed to give you lifetime satisfaction.

This is the latest type of sewing machine, having parts interchangeable with standard parts available throughout the world. Your new electric sewing machine has all the latest improvements. The machine is equipped with a reverse feeding mechanism enabling you to sew in reverse direction as well as in forward direction. It has an oscillating shuttle and central bobbin for smooth performance. The machine features a snap-out race for easy cleaning of the shuttle body, a drop-feed adjustment for darning, an automatic attachment for embroidery, a floating presser foot which sews over pins and heavy fabric, a self-releasing bobbin winder, and a numerically calibrated thread tension.

You will find illustrations for each instruction to simplify the use of your machine. We advise you to read the following pages carefully to obtain the best results from your sewing machine.

Pleasant Sewing

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## GENERAL INSTRUCTIONS FOR THE OPERATION OF YOUR ELECTRIC SEWING MACHINE TO INSERT THE NEEDLE

Turn Balance Wheel towards you until **NEEDLE BAR** Fig 1 (A) is at its highest point, then loosen the **NEEDLE CLAMP SCREW** Fig 1 (B). Hold needle with point down and insert needle with the flat surface to the right into the needle clamp as far as it will go. Then tighten the Needle Clamp Screw.

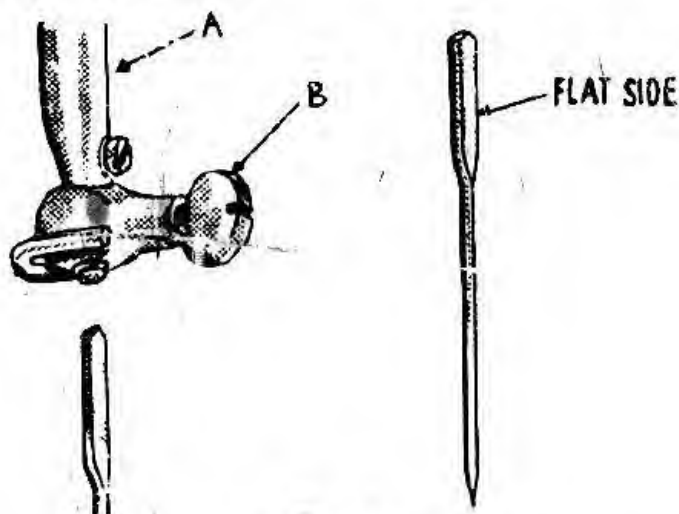


Fig. 1

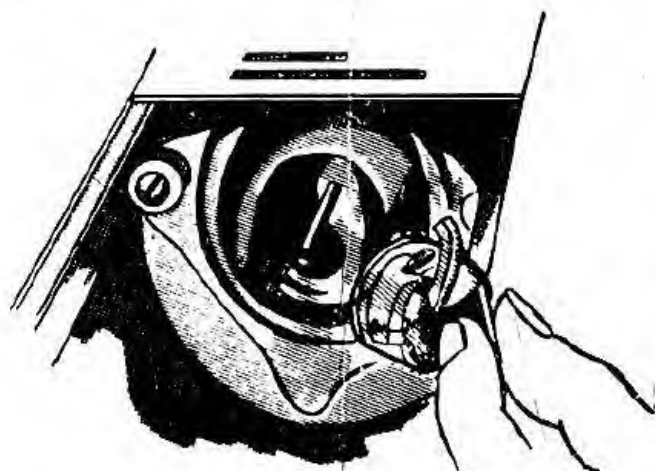


Fig. 2

### TO REMOVE THE BOBBIN CASE

Turn Balance Wheel towards you until needle bar is at its highest point; draw the bed slide open to the left with thumb and forefinger of the left hand; open bobbin case latch and remove bobbin case. As long as the latch remains open, the bobbin will stay in the bobbin case. Release latch, turn open end of bobbin case downwards and bobbin will drop out.

## TO WIND THE BOBBIN

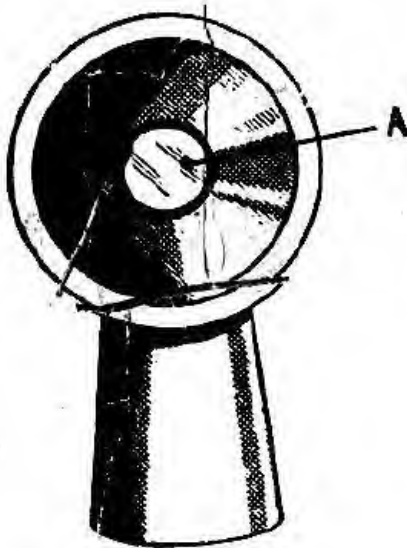


Fig. 3

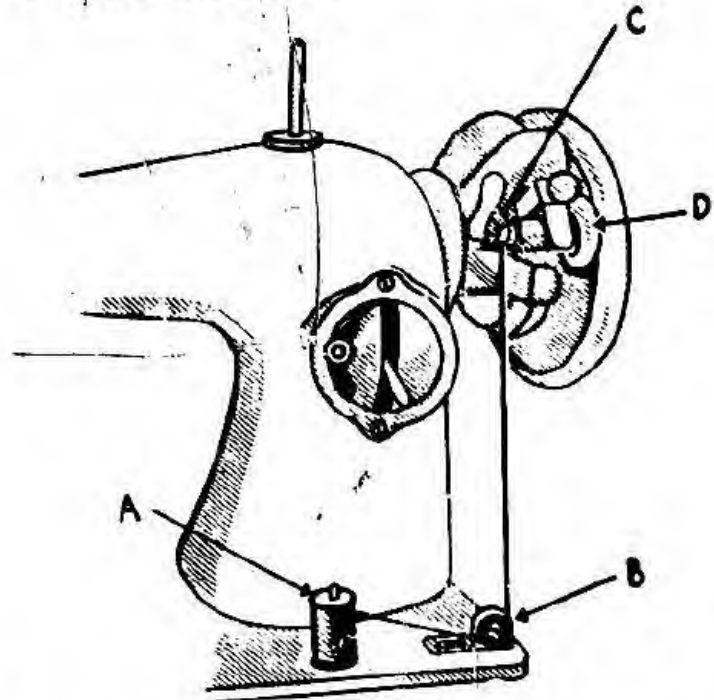


Fig. 4

Loosen the **BALANCE-WHEEL-STOP-MOTION-SCREW** Fig 3 (A) toward you, allowing the balance wheel to run free; place spool of thread on spool pin Fig 4 (A) at the foot of the machine. Pass the thread through tension-bracket Fig. 4 (B) and up to the thread pressing lever Fig 4 (C). Wind thread from inside outwards several times around bobbin, which had been placed on the left end pin of the rubber ring Fig 4 (D). Be sure that the bobbin is pressed to the end of the spindle. Press down the bobbin and bobbin winder latch will drop down and hold the bobbin winder-ring against the balance wheel. Then operate the machine like by sewing.

(continued on next page)

The bobbin winder is automatically released, when sufficient thread has been wound on the bobbin.

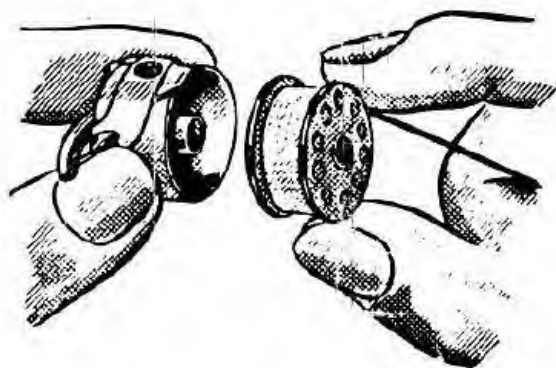


Fig. 5

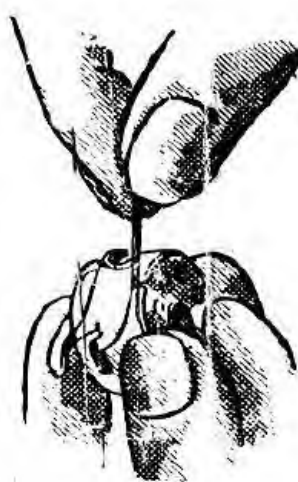


Fig. 6

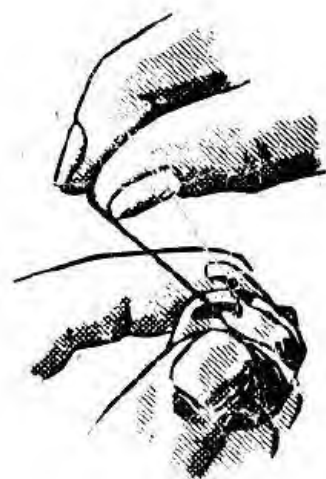


Fig. 7

### THREADING THE BOBBIN CASE

Hold bobbin between thumb and forefinger (see Fig 5, 6, 7) and pull out 2 to 3" of thread. Guide thread into the cross slot in the edge of the bobbin case. Pull thread under the tension spring toward you into the eye.



## TO INSERT BOBBIN CASE

After turning the Balance Wheel until needle bar is at its highest point, insert bobbin into the bed of the machine and place it so that the center stud of the bobbin case holder fits into the slot of the race. By inserting the bobbin case the hole must be on top (as shown in figure 8). Press the bobbin case gently into the bobbin case holder, release at the same time the latch until the stud of the bobbin case holder snaps into the latch. At least 3 to 4 inches of thread should hang freely from the bobbin case. Close the bed slide.

### UPPER THREADING

Turn Balance Wheel towards you until the take-up lever is raised to its highest point. Place spool of thread on the spool pin of the machine arm; pass thread over and through the thread guide Fig. 10 (A) at the top corner of the face-plate, down and over the back to front between the tension-disc Fig. 10 (B) up to thread guard Fig. 10 (C), down into the hook of take-up spring Fig. 10 (D) and over back to front through hole in the end of the thread take-up-lever Fig. 10 (E) down into the eyelet of the face-plate, Fig. 10 (F) into the lower wire-thread guide, Fig. 10 (G) then from left to right

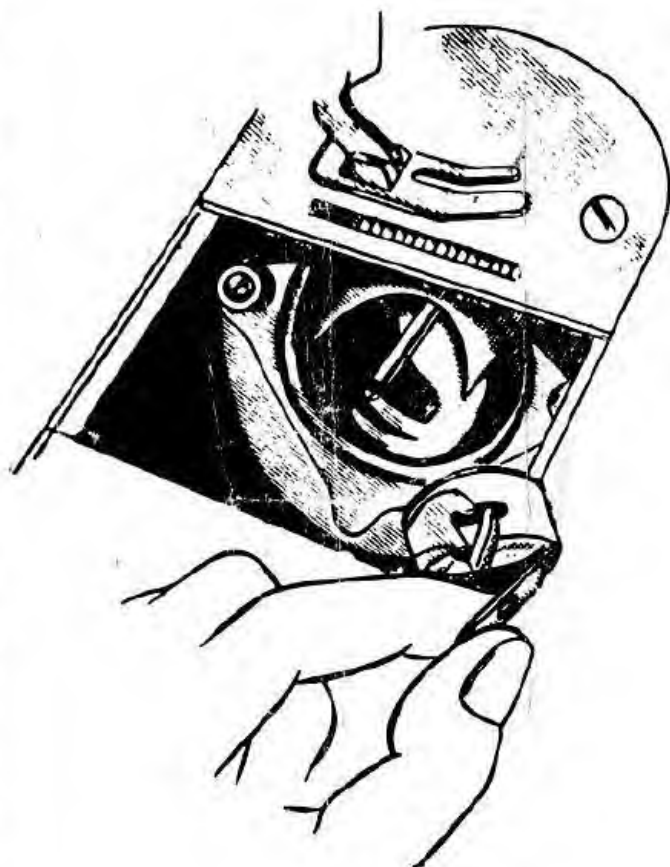


Fig. 8

through eye of the needle Fig. 10 (H). Draw about 2" of thread through the eye of the needle with which to commence sewing. Hold needle thread in your left hand, turn balance wheel towards you until needle moves up and down and up again to its highest point, catching the bobbin thread, which will be brought up that way through the hole in the thread plate.

### TO REGULATE THE PRESSURE

For darning and embroidering, release the pressure by pressing down the automatic darning lever 'A' Figure 9. Make sure the Presser Foot is down when releasing the pressure.

For ordinary sewing — reset the pressure by pressing down on 'B' figure 9.

To increase the pressure press down on 'B' Figure 9 until the desired pressure is obtained. There should be just enough pressure on the foot to allow the fabric to move easily and to prevent it from rising with the needle.

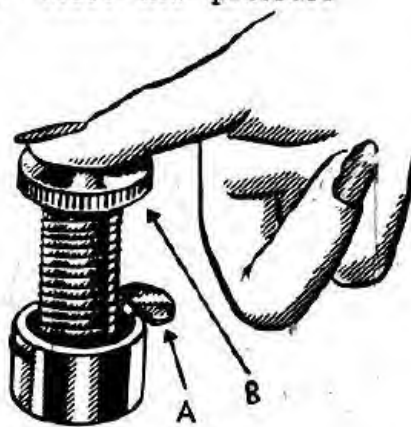


Fig. 9

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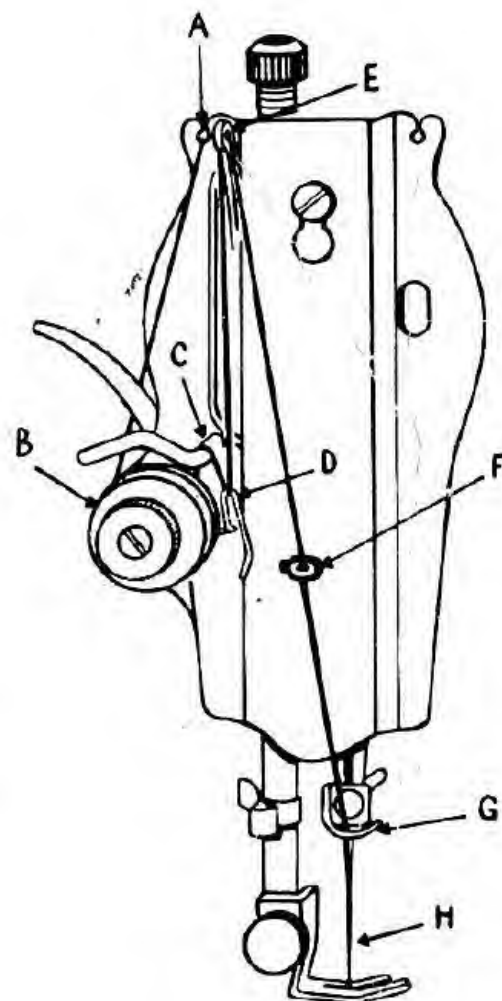


Fig. 10



Fig. 11



Fig. 11 (A)

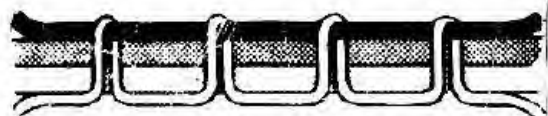


Fig. 11 (B)



Fig. 11 (C)

## REGULATING THE THREAD TENSION

If upper tension is too loose, under thread draws upper thread down, thus forming a small knot or loops, as shown in Fig. 11 (A). If upper tension is too tight, under thread is drawn up as shown in Fig. 11 (B). Fig. 11 (C) illustrates how the threads lock in the center of the material when tension is properly set.

### TO REGULATE THE TENSION

The tension on the needle thread should be regulated only when the presser foot is down. Having lowered the presser foot, turn the small thumb screw (Fig. 11D) at the front of the tension disc over toward you to increase the tension. To decrease the tension, turn the thumb nut over from you.

The tension on the bobbin thread is regulated by the screw (Fig. 11E) in the bobbin case tension spring. To increase the tension, turn this screw over to the right. To decrease the tension, turn the screw over to the left.

When the tension on the bobbin thread has been once properly adjusted, it is seldom necessary to change it, as a correct stitch can usually be obtained by varying the tension on the needle thread.

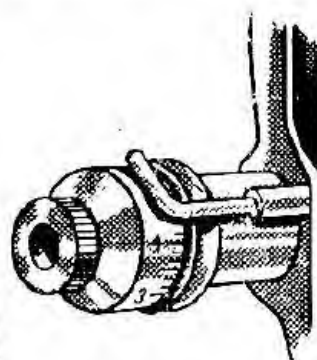
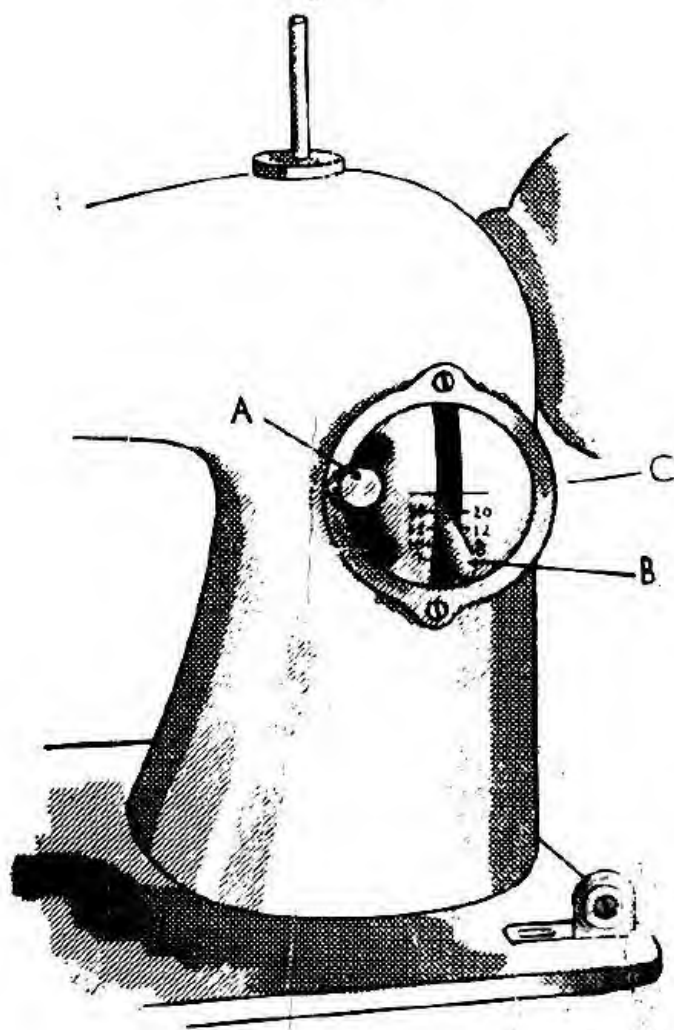


Fig. 11 (D)



Fig. 11 (E)

Fig. 12



## REGULATING THE LENGTH OF THE STITCH

The length of the stitch is regulated by the stitch-regulator and thumb-screw in the slot in front of the arm Fig. 12 (A). Loosen the screw and move regulator downwards and the stitches will become longer. If the regulator is moved in the opposite direction (upwards) the stitches become shorter. After determining the correct position of the regulator, re-tighten the screw immediately so the position will not be altered.

## TO SEW IN REVERSE

Loosen the screw and move lever above center line, Fig. 12 (C). You can now adjust for desired length of reverse stitch. Then tighten the screw and it will lock the stitch. The machine now sews in reverse.

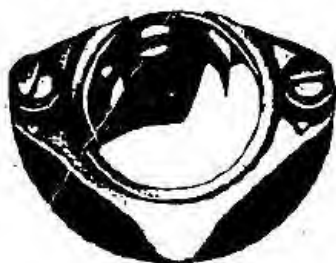


Fig. 13a



Fig. 13b

### **SNAP-OUT RACE:**

The Snap-Out Race, Fig. 13, is designed to facilitate cleaning of the shuttle body. Turn the lever down, and swing the case open. You now have easy access to cleaning the shuttle body. After cleaning, it is essential that all parts be put back correctly in their original place. Before resuming sewing, make sure that race is closed.

### **DROP-FEED:**

For darning and mending. With the single turning of the button your feed mechanism drops so as to enable the material to glide easily without interference. This is especially designed for your machine for the purpose of darning, monogramming, embroidering. Before turning your drop feed button, make sure to turn balance wheel and bring the needle to its highest point.

## HELPFUL HINTS

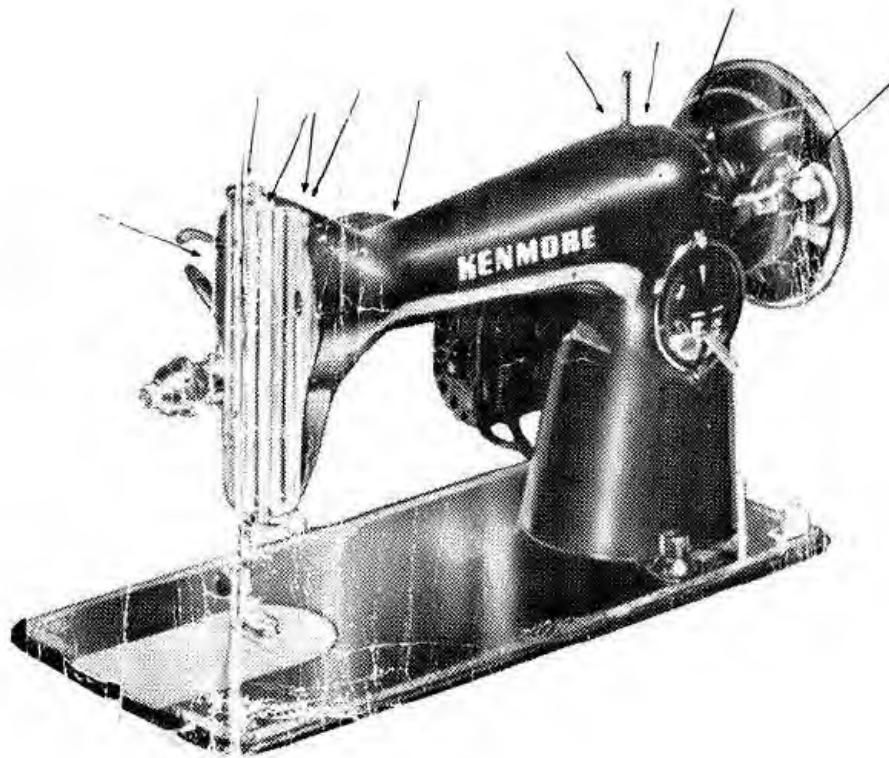
**MACHINE WORKING HEAVILY:** If, after standing idle for some time, the machine works heavily, apply a little paraffin or benzine in place of oil. Then run the machine rapidly to clean the bearings with special sewing machine oil. The use of inferior oil is often the cause of the machine heavy working.

**TO AVOID BREAKING NEEDLES:** See that the presser foot or attachments are securely fastened by the thumb screw. Do not sew heavy seams, or very thick goods with too fine a needle. A large needle and thread to correspond should be used on heavy work. See that the needle is not bent and avoid pulling when stitching.

**BREAKING OF THE NEEDLE THREAD:** If the needle thread breaks it may be caused by:

- Improper threading.
- Tension being too tight.
- The needle thread being too coarse for size of needle.
- The needle being bent or set incorrectly.

**SKIPPING OF STITCH:** The needle may not be accurately set into the needle bar or the needle may be bent or blunt. The needle may be too small for the thread being used.



### **OILING OF THE MACHINE**

To insure easy running, the machine requires oiling and if used continuously it should be oiled every day. One drop of oil in each hole is sufficient. Lift machine back and oil all moving parts on the underside of the machine.

## **INSTRUCTIONS FOR USING THE KENMORE SEMI ROTARY SEWING MACHINE**

For the lifetime of your Kenmore Simpsons-Sears guarantees an efficient repair and parts service.

Take advantage of this service for your convenience and satisfaction. You can obtain this service through any Simpsons-Sears Retail or Mail Order Store.

*Important:* Be sure to state the model number of your machine.

The Model number is C877.15.

The Model number is also shown on the front of your machine as Model No. 15.

Needles, Shuttles, Bobbins and Bulbs may be selected from our General Catalogue or purchased through **your** nearest Simpsons-Sears Retail Store or Order Office.



PARTS LIST FOR  
SEWING MACHINE

LISTE DES PARTIES POUR  
MACHINE A COUDRE

## KENMORE

Model No. C877.15

This model number will be found on label on flange on underpart of machine. Always mention this model number when communicating with us regarding your machine or when ordering repair parts.

### HOW TO ORDER REPAIR PARTS

All parts shown on the following list and illustrated on the parts diagram may be ordered through any Simpson's or Simpsons-Sears retail or mail order store. In ordering parts by mail from the mail order store which serves the territory in which you live, selling prices will be furnished and you will be billed accordingly.

### WHEN ORDERING REPAIR PARTS, ALWAYS GIVE THE FOLLOWING INFORMATION:

1. The Part Number in this list.
2. The Part Name in this list.
3. The Model Number of your machine which is number C877.15 and will be found on label on flange underpart of machine.

### IMPORTANT

This list is valuable. It will assure your being able to obtain proper parts service at all times. We suggest you keep it with other valuable papers.

Modèle No. C877.15

Vous trouverez ce numéro sur l'étiquette apparaissant sur le rebord en dessous de la machine. Mentionnez toujours ce numéro de modèle quand vous communiquez avec nous au sujet de votre machine et quand vous commandez des pièces de rechange.

### COMMANDES DES PIÈCES DE RECHANGE

Vous pouvez commander toutes les pièces listées et illustrées au verso chez Simpson's ou chez Simpsons-Sears Limited à la succursale qui dessert le district où vous demeurez. Vous pouvez toujours obtenir les prix de vente sur demande. Les prix de vente sont indiqués sur la liste.

### QUAND VOUS COMMANDEZ des PIÈCES de RECHANGE, DONNEZ TOUJOURS les INFORMATIONS SUIVANTES:

1. Le numéro de la pièce dans la liste.
2. Le nom de la pièce dans la liste.
3. Le numéro du modèle sur l'étiquette apparaissant sur le rebord en dessous de la machine.

### IMPORTANT

Cette liste est précieuse, elle vous assurera la livraison des pièces mêmes dont vous avez besoin, elle évitera les erreurs. Nous suggérons que vous conserviez cette liste avec vos autres papiers importants.

**SIMPSONS-SEARS LIMITED**

# List of Sewing Machine Parts

Item Number	Parts Name	Parts Number	Item Number	Parts Name	Parts Number
1	Sewing Machine Head		79	Feed dog	J 01450
2	Arm	J 01002	80	Feed dog screw	J 1207
	Bed	J 01003	81	Feed lifting rock shaft	J 01410
4	Arm down pin	J 01004	82-1	Feed driving rock shaft crank	J 01412
5	Arm screw	J 1137	82-2	Feed driving rock shaft crank roller	J 01413
6	Arm slide cover, Arm shield	J 01012	82-3	Feed lifting rock shaft crank roller and stud	J 01329
7	Slide cover set screw	J 3675	83	Crank clamping screw	J 1156
8	Oil tube	J 01013	84	Crank connecting rod	J 01334
9	Oil tube spring	J 01014	85	Crank connecting rod cap screw	J 1884
10	Oil tube washer	J 01015	86	Crank connecting rod hinge screw	J 1370
11	(Presser foot lifter screw, Hinge bar clamping screw)	J 1443	87	Connecting lever screw nut	J 1118
12	Upper shaft or Arm shaft	J 01201	88	Oscillating rock shaft	J 01331
13	Upper shaft arm bushing	J 01202	89	Oscillating shaft crank	J 01326
14	Arm shaft bushing set screw	J 1430	89-1	Oscillating shaft crank (body)	J 01327
15	Thread take up cam, Grooved cam	J 01209	89-2	Oscillating shaft crank slide block	J 01329
16	Thread take up cam Position screw	J 2277	90	Shuttle driver pin	J 01330
17	Needle bar connecting link	J 01125	91	Lower shaft or oscillating shaft	J 01325
18	Needle connecting link adjusting screw	J 3444	92	Shuttle driver	J 01310
19	Needle bar connecting link stud screw	J 1564	93	Shuttle race (complete)	J 01302
20	Needle bar connecting link hinge screw nut	J 18	93-1	Shuttle race (body)	J 01303
21	Needle bar	J 01122	93-2	Shuttle race back or Shuttle race ring	J 01304
22	Needle bar connecting stud	J 01124	93-3	Shuttle race pin	J 01305
23	Needle bar set screw	J 1154	93-4	Shuttle race ring front plate or shuttle race cap	J 01306
24	Needle bar bushing	J 01123	93-5	Shuttle race back spring screw	J 1639
25	Needle bar bushing set screw	J 2364	93-6	Shuttle race cap	J 01307
26	Needle bar bushing felt	J 01130	93-7	Shuttle race cap screw	J 1653
27	Needle clamp	J 01127	94	Shuttle race screw	J 1144
28	Needle clamp screw	J 1546	95	Shuttle body	J 01308
29	Needle bar thread guard	J 01128	96	Bobbin Case	J 01309
30	Needle bar thread guard screw	J 1249	96-1	Bobbin case (body)	J 01313
31	Thread cutter	J 01129	96-2	Bobbin case latch lever	J 01318
32	Needle plate	J 01135	96-3	Bobbin case latch	J 01319
33	Needle plate screw	J 1681	96-4	Latch pin	J 01320
34	Slide Plate	J 01137	96-5	Bobbin case latch spring	J 01321
35	Hinge Plate Spring	J 01138	96-6	Bobbin case latch stop screw	J 1586
36	Slide spring screw	J 3726	96-7	Tension spring for Bobbin case	J 01314
37	Balance Weight	J 01205	97	Bobbin	J 1585
38	Arm shaft balance set screw	J 3505	98	Arm spool pin	J 01008
39	Balance wheel	J 01201	99	Arm spool pin washer	J 01009
40	Balance wheel bushing clamp stop motion	J 01206	100	Face plate (complete)	J 01101
41	Balance wheel bushing pin	J 01207	100-1	Face plate (body)	J 01102
42	Stop motion screw	J 1254	100-2	Face plate tension seat	J 01109
43	Clamp stop motion clamp washer	J 01206	100-3	Tension thread guard	J 01107
44	Friction screw, stop screw	J 1246	100-4	Tension stud bushing	J 01106
45	Rotating Shaft Crank Pin	J 1457	100-5	Face plate thread guard	J 01103
			100-6	Face plate thread guard rivet	J 01104
46	Thread take up lever (complete)	J 01210	101	Tension screw stud	J 2748
46-1	Thread take up lever	J 01211	102	Tension stud set screw	J 2749
46-2	Thread take up lever roller	J 01213	103	Thread take up spring regulator	J 01110
46-3	Thread take up lever stud	J 01214	104	Thread take up spring regulator screw	J 1840
47	Thread take up lever set screw	J 2980	105	Thread take up spring	J 01112
48	Presser bar	J 01140	106	Tension disk wheel	J 01111
49	Presser regulating thumb screw	J 3711	107	Tension releasing pin	J 01115
50	Presser bar spring washer	J 01142	108	Tension releasing dice release washer	J 01112
51	Presser foot (fixed)	J 01160	109	Tension spring	J 01114
52	Presser Foot (Hinged)	J 01155	110	Tension stud nut	J 56
			111	Face plate screw	J 1189
53	Presser bar guide bracket	J 01143	112	Bobbin winder (complete)	J 01501
54	Presser bar guide bracket set screw	J 1448	113	Bobbin winder (body)	J 01502
55	Presser bar spring	J 01141	114	Bobbin winder spindle holder	J 01503
56	Presser foot lifter	J 01145	115	Bobbin winder frame hinge screw	J 3766
57	Presser foot lifter hinge bar	J 01146	116	Bobbin winder spring	J 01506
58	Feed cam	J 01401	117	Stop latch adjusting plate	J 01504
59	Feed cam set screw	J 2269	118	Bobbin winder tension set screw	J 1192
60	Forked rod	J 01402	119	Bobbin winder spindle	J 01506
61	Forked rod screw	J 1174	120	Bobbin winder spindle pin	J 01507
62	Feed forked connecting hinge screw	J 2364	121	Bobbin winder pulley	J 01508
63	Feed connecting slide block	J 01406	122	Bobbin winder friction ring	J 01509
64	Feed forked connecting roller screw stud	J 2070	123	Stop latch	J 01510
65	Feed regulator	J 01403	124	Bobbin winder stop latch screw	J 3750
66	Feed regulator hinge screw	J 2810	125	Bobbin winder stop latch spring	J 01511
67	Feed regulation washer	J 01404	126	Bobbin winder set screw	J 1187
68	Feed regulator thumb screw	J 3676	127	Tension bracket	J 01515
69	Feed regulator screw washer	J 01405	127-1	Tension bracket body	J 01516
70	Feed rock shaft rocker bar	J 01430	127-2	Bobbin Winder Tension Disc	J 01517
71	Center screw	J 1305	127-3	Bobbin Winder Tension Disc	J 01518
72	Feed rock shaft center nut	J 16	127-4	Bobbin winder bracket spring	J 01519
73	Feed bar	J 01415	127-5	Bobbin Winder Bracket Disc Screw	J 1209
74	Feed bar center screw	J 1313	127-6	Bobbin Winder Bracket Body Screw	J 01520
75	Feed bar center screw nut	J 17			

